

**REMARKS**

Claims 1-17 are pending in the application and claims 3, 8, 10 and 13 are canceled.

Claims 1, 2, 4-7, 9, 11, 12 and 14-17 stand rejected.

**Claim Rejections - 35 U.S.C. § 103(a)**

Claims 1-2, 5-7, 9, 11, 12 and 14-17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Mitsui (US 7,222,235), Hsieh et al. (US 7,003,135) and Rhoads (US 6,411,725).

Claim 1 recites, *inter alia*, object extracting means, for extracting a plurality of facial regions of humans from within the image;

information attaching means for attaching different information to each of the facial regions that do not overlap with other facial regions, and acquiring said information-attached image;

input means for receiving photographed-image data obtained by photographing an image reproducing medium, on which the information-attached image acquired by the information attaching means is reproduced, with image pick-up means; and

detection means for detecting said information from said photographed-image data for each of said plurality of facial regions contained in said information-attached image.

To summarize, claim 1 generally requires: (1) extracting a plurality of facial regions of humans from within an image; (2) attaching different information, which does not overlap with

that of other facial regions, to each of the regions, and acquiring the information-attached image;  
(3) receiving photographed-image data obtained by photographing an image reproducing medium, on which the information-attached image is reproduced, with image pick-up means; and  
(4) detecting the information from the photographed-image data for each of the plurality of facial regions contained in the information-attached image.

In the rejection, the Examiner alleges Mitsui discloses most of the features recited in claim 1. Specifically, the Examiner alleges that Mitsui discloses attaching information, such as a digital watermark, to a plurality of photographed objects. Notably, the Examiner cites to FIG. 33 as showing the plurality of photographed objects. However, the Examiner concedes:

(1) Mitsui fails to disclose that the digital watermark is attached to “regions that are facial regions.” *See* Office Action, p. 4; and

(2) Mitsui fails to disclose that the received data can be a photographed image obtained by photographing an image reproducing medium on which the information-attached image is reproduced.

To compensate for these deficiencies, the Examiner relies on Hsieh. The Examiner contends that in the field of endeavor of faces tracking, Hsieh discloses a method for detecting and tracking faces in real time. As a reason to combine Hsieh and Mitsui, the Examiner contends it would have been obvious to include the information attaching/detecting system of Mitsui with the face region generator of Hsieh in order to effectively track human faces in real time. *See* Office Action, p.5.

In response, Applicant respectfully submit that even if Mitsui and Hsieh could be combined, there is no support for attaching the digital watermarks of Mitsui to the detected human faces in Hsieh. There is simply no support for modifying Mitsui in this manner.

This is, even if Hsieh discloses a method for detecting facial regions, there is no motivation to apply the method for detecting facial regions in Hsieh to the system of Mitsui, because Mitsui suggests that the photographed object is recognized as coordinates. For instance, FIG. 32 shows an example of a document format information table that defines the coordinates where the digital watermark is embedded. See col. 38, lines 16-24. There is simply no correlation between these coordinates and a plurality of facial regions of humans. Accordingly, even if Mitsui could be modified to include Hsieh's human face recognition method, there is no basis for then attaching the digital watermark to the recognized human faces.

Additionally, even if combined as suggested, the suggestion combination of references fails to disclose attaching different information to each of the facial regions that do not overlap with other facial regions, as recited in claim 1. Most notably, Mitsui fails to disclose that each photographed object includes a facial region that differs from each another facial region. That is, Mitsui does not disclose extracting a plurality of facial regions of humans from within an image, attaching different information, which does not overlap with that of other facial regions, to each of the facial regions. That is, Mitsui fails to teach or suggest the technical idea that information on mutually different people are attached to the image as a digital watermark. Rather, as set forth above, Mitsui relies on document format information for placing the digital watermarks.

Accordingly, the invention of claim 1 is patentable over Mitsui, Hsieh and Roads, because it is impossible to achieve the invention of claim 1 by combining the teachings of Mitsui, Hsieh and Roads. Further, because independent claims 7 and 9 recite similar features, Applicants submit these claims are allowable for the same reasons set forth above. Finally, Applicants submit claims 2, 5-6, 11, 12 and 14-17 are allowable, at least by virtue of their dependency.

**Claim Rejections - 35 U.S.C. § 103(a)**

Claim 4 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Mitsui, Hsieh and Rhoads as applied to claim 1, in further view of Motta et al. (US 6,726,103).

In response, Applicants submit that because Motta, either taken alone or in combination with Mitsui, Hsieh and Rhoads, fails to compensate for the deficiencies of those references as applied to claim 1 above, claim 4 is allowable, at least by virtue of their dependency.

**Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

RESPONSE UNDER 37 C.F.R. § 1.116  
Application No.: 10/787,391

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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